

North America – Climate, Vegetation, Wildlife, part 2

(Summary)

from the film *North America – Climate, Vegetation, and Wildlife*, Mexus Education, Ltd.

The Lauerentian

- The **Laurentian** or the **Cool Temperate East Margin** type of climate is similar to that of the Prairies except that it is milder due to the influence of the sea. This type of climate occurs in the northeastern part of North America.
- Winters are cold in this region. The cold **Labrador Current** makes this region cold in winter. The summers are warm with moderate rain throughout the year, but most of it occurs in the summer. The **Westerlies** blow from the land and are quite dry but they pick up moisture as they blow over the **Great Lakes** and bring rainfall to the region.
- The **vegetation** of this region is mainly mixed forests where both **coniferous** trees and **deciduous** trees grow together. In the warmer regions, trees like the oak and maple are common.
- Fur-bearing animals like bears, foxes, deer, beavers, skunks, and squirrels are found in the forests.

The Maritime

- The **British** or the **Cool Temperate West Margin** type is also known as the **Oceanic** type, the **Maritime** type, or the **West European** type. This type of climate occurs on the western coastal areas of Canada and northern California in the USA. It has warm summers and mild winters. The warm **Alaska Current** makes this region warmer than it otherwise would have been.
- Heavy rainfall is well distributed throughout the year. The Rockies prevent the influence of the Westerlies from going further inland.
- The main vegetation of this region is comprised of tall coniferous trees, mainly the fir. Some of the important trees found here are the Douglas Fir, Redwood, Sequoias, and Spruce.
- Fur-bearing animals such as hares, badgers, squirrels, hedgehogs, beavers, and bears are found here.

The Mediterranean Climate

- The **Mediterranean** type of climate is found in southern California along the west coastal margin, south of the British type of climate.
- The hot and dry conditions in this region allow very little vegetation to grow. The plants that grow here obtain and conserve water in various ways. The cactus is the most common vegetation that is found here. It has short roots near the ground surface so that it quickly absorbs the morning dew before it evaporates. It stores water in its fleshy stem.
- In the cactus plant, the leaves are modified into spines. By thus reducing the leaf surface, water is conserved. The spines also protect the plant from animals. Moisture is conserved in the stems which then become thick and succulent. The **Sonora Desert** in Arizona, USA is well known for its fleshy and thorny plants such as giant saguaro, cholla, and other varieties of cacti and yucca.
- Animals that can survive with very little water live here. The desert fox, gazelles, scorpions, rattlesnakes, lizards, and various types of insects are found here.
- In **deserts**, the rate of **evaporation** exceeds rainfall. They get less than 25 centimeters (10 inches) of rain per year. Deserts also experience huge temperature fluctuations. The low **humidity** during the day allows more than 90% of the sun's heat to reach the ground. As such, day temperatures can be as high as 49°C or 120°F.
- At sunset, heat is rapidly lost to the atmosphere due to the absence of insulating clouds. The nighttime temperature can drop to -5°C or 23°F.
- The deserts of North America like the **Mojave, Great Basin**, and the **Sonora Desert** are dry because they are a great distance inland or because they are on the **leeward** side of a mountain range. The clouds along with the humidity that comes off the ocean rarely reach them.
- Desert birds and animals include the roadrunner, elf owl, spiders, snakes and scorpions. Birds like the cactus wren nest in the leaves of the Joshua tree, while rodents like the pack rat build their homes at the base of the tree.
- Insects like the yucca moth, weevil, and termites also depend on the tree and in return, help in pollination.

The Warm Temperate

- **China** type or the **Warm Temperate East Margin** type of climate is found in Florida and the **Gulf Coast** states in southeast USA. It lies in the **Trade Wind** belt which are on-shore winds that blow throughout the year. Rainfall decreases from the east to the west, becoming dry by the time it reaches the desert.
- A unique feature of this region is the **hurricane**, whose tracks sweep over the West Indies and bring plenty of rain. Hurricanes can be very destructive.
- Summers are hot and winters are mild with moderate rainfall almost throughout the year. Mixed forests are found here. Oak and poplar are found in the warmer regions, while coniferous trees dominate the cooler regions. Swamp forests of cypress trees are found along the coast in Florida.
- Foxes, squirrels, deer, raccoons, rabbits, muskrats, water moccasins, manatees, garpikes, white ibises, and alligators are found here.

The Tropical

- The **Tropical** climate is found in southern Mexico, Central America, and the West Indies. It is very similar to the **Monsoon** type of climate. It is hot and humid with abundant rainfall brought by the Northeast Trade Winds throughout the year.
- The natural vegetation is comprised of trees like palm, logwood, mahogany, and similar hardwood trees. Rubber and cacao are native to this region.
- The wildlife in these forests consists of birds and animals like monkeys, parrots, hummingbirds, and snakes.

The Rockies

- In the **Rocky Mountains**, climatic conditions change with altitude which results in broad zones, each with its typical plants and animals. Temperature decreases while ascending the mountain slopes. The capacity of the air to hold water vapor decreases causing an increase in rain and snow. The thin, dry air loses heat very quickly and so nights in the mountains are very cold.
- The height above which it is too cold and windy for trees to grow is called the **tree line**. Beyond the tree line, there are only low-growing bushes and shrubs. This type of vegetation is known as the **Alpine** vegetation.
- The height above which there is permanent cover of ice and snow is known as the **snow line**. Above the snow line, no vegetation can grow. The animals common to this region are deer, bears, and wingless insects.